

## DEVICE AND METHOD FOR MULTICRYSTALLINE SILICON WAFERS

### Abstract

A method for making ingots, and devices for making ingots are provided.

- 5 Crucibles are provided that are reusable for forming multicrystalline silicon ingots. Crucibles are provided with features such as multiple components, coefficients of thermal expansion, and coatings that enhance a release of the ingots from the crucibles after cooling. Coatings on crucibles are provided that reduce or eliminate contamination of silicon ingots during formation. Methods of forming composite
- 10 wafers are provided that produce a low cost wafer without sacrificing performance.

"Express Mail" mailing label number: EV298565778US  
Date of Deposit: October 24, 2003  
This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.